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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

MIN, et al.

Application No. 10/523,343

International Filing Date: July 22, 2003

For: "THIOREDOXIN MUTANTS AND
USES THEREOF"

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) Art Unit: Unassigned
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) Examiner: Unassigned
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) Confirmation No. 5753
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INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

NEEDLE & ROSENBERG, P.C.
Customer Number 23859

Sir:

Pursuant to the requirements of 37 C.F.R. § 1.56, submitted herewith on the accompanying Information Disclosure Statement List is a listing of documents known to Applicants and/or their attorneys. In accordance with 37 C.F.R. §1.98(a)(2), copies of any cited U.S. patent or U.S. patent application publication documents are not enclosed. Copies of any cited foreign patent document and/or any non-patent publication are enclosed.

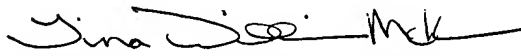
This Information Disclosure Statement is believed to be filed in a timely manner pursuant to 37 C.F.R. § 1.97(b)(3), in that a first Office Action on the merits of the present patent application has not yet been mailed to Applicants.

Consideration of the cited documents and making the same of record in the prosecution of the above-referenced application are respectfully requested.

No fee is believed due; however, the Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 14-0629.

Respectfully submitted,

NEEDLE & ROSENBERG, P.C.

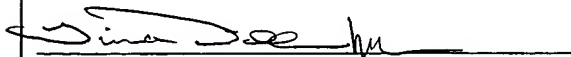


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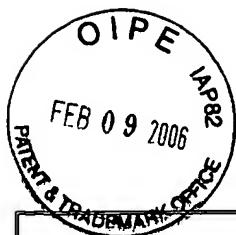
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I hereby certify that this correspondence, including any items indicated as attached or included, is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on the date indicated below.


Tina Williams McKeon

February 7, 2006
Date

**INFORMATION DISCLOSURE
STATEMENT LIST**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/523,343
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First Named Inventor	Min, et al.
Group Art Unit	Unassigned
Examiner Name	Unassigned

U.S. PATENT DOCUMENTS

Examiner's Initials	Cite No.	Document No.	Date	Name	Class	Subclass	Filing Date (if appropriate)

FOREIGN PATENT DOCUMENTS

Examiner's Initials	Cite No.	Foreign Patent Document Country Code-Number-Kind Code	Date	Name	Translation Yes/No
	A1	WO 91/04320	April 4, 1991	Rosén, et al.	
	A2	WO 98/24472	June 11, 1998	Powis, et al.	

NON-PATENT DOCUMENTS

Examiner's Initials	Cite No.	Non-Patent Citations (include Author, Title, Publisher, Relevant Pages, Date and Place of Publication)
	A3	Baker, A. et al., Thioredoxin, a Gene Found Overexpressed in Human Cancer, Inhibits Apoptosis in Vitro and in Vivo, Cancer Research, Volume 57, No. 22, 5162-67, 1997
	A4	Berggren, M., et al., Thioredoxin and Thioredoxin Reductase Gene Expression in Human Tumors and Cell Lines, and the Effects of Serum Stimulation and Hypoxia, AntiCancer Research, Volume 16, No. 6B, 3459-66, November – December 1996
	A5	Bishopric NH, Webster KA. Preventing apoptosis with thioredoxin: ASK me how. Circ Res. 2002 Jun 28;90(12):1237-9.
	A6	Chang, H.Y., Activation of Apoptosis Signal-Regulation Kinase 1 (ASK1) by the Adapter Protein Daxx, Science, Volume 281, Issue 5384, 1860-63, September 18, 1998
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	A8	Filatov, V.L., et al., Troponin: Structure, Properties, and Mechanism of Functioning, Biochemistry, Volume 64, No. 9, 969-85, September 1, 1999
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	A11	Gasdaska, J.R., et al., Cell Growth Stimulation by the Redox Protein Thioredoxin Occurs By a Novel Helper Mechanism, Cell Growth and Differentiation, Volume 6, No. 12, 1643-50, December, 1995
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**Examiner
Signature:****Date Considered**

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		Group Art Unit	Unassigned
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	A15	Hannon, G.J., RNA Interference, Nature, Volume 418, No. 6894, 244-51, July 11, 2002	
	A16	Hatai, T., et al., Execution of Apoptosis Signal-Regulating Kinase 1 (ASK1)-Induced Apoptosis by the Mitochondria-dependent Caspase Activation, Journal of Biological Chemistry, Volume 275, No. 34, 26576-81, August 25, 2000	
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	A27	Min, W., et al., TNF Initiated E-Selectin Transcription in Human Endothelial Cells Through Parallel TRAF-NF-Kappa B and TRAF-RAC/CDC42-JNK-c-Jun/ATF2 Pathways, Journal of Immunology, Volume 159, No. 7, 3508-18, 1997	
	A28	Moulton, K., et al., Angiogenesis Inhibitors Endostatin or TNP-470 Reduce Intimal Neovascularization and Plaque Growth in Apolipoprotein E-Deficient Mice, Circulation, Volume 99, 1726-32, December, 1999	
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	A30	Nishitoh, H., et al., ASK1 is essential For JNK/SAPK Activation by TRAF2, Molecular Cell, Volume 2, No. 3, 389-95, September 1, 1998	

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	A31	Noland, T.A., et al., Protein Kinase C Phosphorylation of Cardiac Troponin I and Troponin T Inhibits Ca(2+)-stimulated MgATPase Activity in Reconstituted Actomyosin and Isolated Myofibrils, and Decreases Actin-myosin Interactions, Journal of Molecular and Cell Cardiology, Volume 25, No. 1, 53-65, January 1, 1993	
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	A34	Powis, D., et al., The Role of the Redox Protein Thioredoxin in Cell Growth and Cancer, Free Radic. Biol. Med., Volume 29, No. 3-4, 312-22, August 1, 2000	
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	A41	Takeda et al., Apoptosis signal-regulating kinase 1 (ASK1) induces neuronal differentiation and survival of PC12 cells.	
	A42	Tobiume, K. et al., ASK1 is Required For Sustained Activations of JNK/p38 MAP Kinases and Apoptosis, EMBO Reports, Volume 2, No. 3, 222-28, 2001	
	A43	Tournier C. et al., Requirement of JNK for stress-induced activation of the cytochrome c-mediated death pathway. <i>Science</i> . 2000;288:870-874	
	A44	Treier, M., et al., Ubiquitin-dependent c-Jun Degradation in Vivo is Mediated by the Delta Domain, Cell, Volume 78, No. 5, 787-98, September 9, 1994	
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	A46	Yuasa, K. et al., A Novel Interaction of cGMP-dependent Protein Kinase I With Troponin T, Journal of Biological Chemistry, Volume 274, No. 52, 37429-34, December 24, 1999	

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	A47	Zhang, L., et al., Suppression of Apoptosis Signal-regulating Kinase 1-induced Cell Death by 14-3-3 Proteins, <i>Proc. Natl. Acad. Sci.</i> , Volume 96, 8511-15, July, 1999	
	A48	Zhang et al., Hsp-90-Akt phosphorylates ASK1 and inhibits ASK1-mediated apoptosis, <i>Oncogene</i> . 2005 Jun 2;24(24):3954-63.	
	A49	Zhang et al., PKD specifically mediates ASK1-JNK signaling induced by H ₂ O ₂ , but not TNF. <i>J Biol Chem</i> . 2005 May 13;280(19):19036-44	
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